

CLAIMS

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1 1. A method of programming a welding-type
2 system, comprising:

3 storing at least one welding program in a
4 pda;

5 connecting the pda to the welding-type
6 system; and

7 downloading the at least one welding program
8 to the welding-type system.

1 2. The method of claim 1, wherein storing
2 includes uploading the at least one program, from a second
3 welding-type system.

1 3. The method of claim 1, wherein storing
2 includes e-mailing the at least one program.

1 4. The method of claim 1, wherein connecting
2 includes making a wired connection between the pda and the
3 welding-type system.

1 5. The method of claim 4, wherein connecting
2 includes making an RS232 connection between the pda and the
3 welding-type system.

1 6. The method of claim 1, wherein connecting
2 includes making a wireless connection between the pda and
3 the welding-type system.

1 7. The method of claim 6, wherein connecting
2 includes making an IR connection between the pda and the
3 welding-type system.

1 8. A method of programming a welding-type
2 system, comprising:
3 storing a plurality of welding programs in a
4 pda;
5 connecting the pda to the welding-type
6 system; and
7 selecting at least one of the plurality of
8 programs for downloading;
9 downloading the at least one of the plurality
10 of programs to the welding-type system.

1 9. The method of claim 8 wherein selecting is
2 performed before connecting.

1 10. The method of claim 8 wherein selecting is
2 performed after connecting.

1 11. The method of claim 8, wherein storing
2 includes at least one of uploading the at least one program,
3 from a second welding-type system and e-mailing the at least
4 one program.

1 12. The method of claim 9, wherein connecting
2 includes making at least one of an RS232 connection and an
3 IR connection between the pda and the welding-type system.

1 13. The method of claim 8, wherein the plurality
2 of programs are stored in a single file, and downloading
3 includes sending a portion of the file.

1 14. The method of claim 8, further comprising
2 editing the at least one of the plurality of programs.

1 15. The method of claim 14, wherein editing is
2 performed before downloading.

1 16. A welding-type system, comprising:
2 a source of welding-type power;
3 a controller, operatively connected to the
4 source of welding-type power, wherein the controller
5 includes a memory;
6 a memory input, connected to the memory and
7 further connectable to a pda;
8 a downloading routine, operatively connected
9 to the memory input.

1 17. The system of claim 16, further comprising a
2 memory output, connected to the memory and further
3 connectable to the pda.

1 18. The system of claim 16, wherein the memory
2 input includes one of a wired or wireless connection.

1 19. The system of claim 18, wherein the memory
2 input is one of an RS232 connection and an IR connection.

1 20. The system of claim 15, further comprising, a
2 pda connected to the memory input, wherein the pda includes
3 a memory with a weld program stored therein.

1 21. The system of claim 20, wherein the
2 downloading routine is stored in the pda.

1 22. The system of claim 15, wherein the
2 downloading routine is stored in the controller.

1 23. A welding-type system, comprising:
2 a source of welding-type power;
3 a controller, operatively connected to the
4 source of welding-type power, wherein the controller
5 includes a memory and a controller i/o port;
6 a pda, having a memory and a plurality of
7 weld programs stored therein, and further having a pda
8 i/o port connected to the controller i/o port;
9 a weld program selecting routine operatively
10 connected to the pda; and
11 a downloading routine, operatively connected
12 to the pda.

1 24. The system of claim 23, further comprising an
2 uploading routine, operatively connected to the pda.

1 25. The system of claim 24, wherein the i/o ports
2 includes at least one of an RS232 connection and an IR
3 connection.

1 26. The system of claim 22, further comprising a
2 weld program editing routine operatively connected to the
3 pda.

1 27. A welding-type system, comprising:
2 a source of welding-type power;
3 a controller, operatively connected to the
4 source of welding-type power;
5 controller memory means for storing at least
6 one welding program in the controller, connected to the
7 controller;
8 pda memory means for storing at least one
9 welding program in a pda;

10 means for connecting the pda memory means to
11 the controller memory means; and

12 means for downloading the at least one
13 welding program to the welding-type system, connected
14 to the pda memory means for storing.

1 28. The system of claim 27, further comprising,
2 connected to the pda means for storing, at least one of:
3 means for uploading the at least one program from
4 a second welding-type system;
5 and means for e-mailing the at least one program.

1 29. An apparatus for programming a welding-
2 type system, comprising:
3 a source of welding-type power;
4 a controller, operatively connected to the
5 source of welding-type power;
6 controller memory means for storing at least
7 one welding program in the controller, connected to the
8 controller;
9 pda memory means for storing a plurality of
10 welding programs in a pda;
11 means for connecting the pda memory means to
12 the controller memory means; and
13 means for the user to select at least one of
14 the plurality of programs for downloading;
15 means for downloading the at least one of the
16 plurality of programs to the controller memory means.

1 30. The apparatus of claim 29, wherein the means
2 for downloading includes means for downloading a portion of
3 a file.

1 31. The apparatus of claim 30, further comprising
2 means for editing the at least one of the plurality of
3 programs, connected to the pda memory means.

1 32. A program for storing weld schedules on
2 a pda, comprising:

3 a storage routine, that stores at least one
4 weld schedule in a memory on the pda;

5 a connection routine connects the pda to
6 connect to a welding-type system; and

7 a download routine that downloads the at
8 least one schedule to the welding-type system.

1 33. The program of claim 32, further comprising
2 an upload routine that allows the pda to upload at least one
3 weld schedule from at least one of a second welding-type
4 system and an e-mail message.

1 34. The program of claim 33, wherein the
2 connection routine includes a wireless protocol.

1 35. A program for storing weld schedule on a
2 pda, comprising:

3 a storage routine, that stores a plurality of
4 weld schedules in a memory on the pda;

5 a selection routine that allows the user to
6 select at least one of the weld schedules for
7 downloading;

8 a connection routine connects the pda to a
9 welding-type system; and

10 a download routine that downloads the at
11 least one schedule to the welding-type system.

1 36. The program of claim 35 wherein the selection
2 routine is performed before the connection routine.

1 37. The program of claim 36, wherein the
2 selection routine is performed after the connection routine.

1 38. The program of claim 35, further comprising
2 an upload routine that allows the pda to upload at least one
3 weld schedule from at least one of a second welding-type
4 system and an e-mail message.

1 39. The program of claim 38, further comprising
2 an editing routine that allows the user to edit the at least
3 one of the plurality of schedules.

1 40. A method of uploading programs from a
2 welding-type system, comprising:
3 storing a plurality of welding programs in a
4 memory in the welding-type system;
5 connecting a pda to the welding-type system;
6 and
7 selecting at least one of the plurality of
8 programs for uploading;
9 uploading the at least one of the plurality
10 of programs to the pda.

1 41. A method of transferring data to or from
2 a welding-type system, comprising:
3 wirelessly connecting a device to the
4 welding-type system; and
5 transferring a welding program to or from the
6 device from the welding-type system.

1 42. The method of claim 41, further including e-
2 mailing the program to the device, storing the program on
3 the device, and transferring, over the wireless connection,
4 the program to the welding-type system.

1 43. The method of claim 41, wherein wirelessly
2 connecting includes connection between welding-type system
3 and one of a pda, laptop computer and desktop computer.

4 44. A welding-type system, comprising:
5 a source of welding-type power;
6 a controller, operatively connected to the
7 source of welding-type power, wherein the controller
8 includes a memory and a controller wireless port;
9 a remote computing device, having a memory
10 for storing a plurality of weld programs therein, and
11 further having a remote wireless port connected to the
12 controller wireless port;
13 a weld program selecting routine operatively
14 connected to the device; and
15 a transfer routine, operatively connected to
16 the device.

1 45. The system of claim 44, further comprising a
2 download routine that allows the device to download at least
3 one weld schedule from the device to the controller, wherein
4 the at least one program is in an e-mail message.